

AMENDMENTS TO THE CLAIMS

IN THE CLAIMS:

A complete set of claims is provided below.

Please amend Claims 1 and 3, and add new Claims 28-39 as follows:

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1. (Currently Amended) A method for arbitrating use of a network medium to avoid collisions caused by multiple nodes attempting to transmit data on the network medium at the same time, said method comprising the steps of:

listening to a network medium to determine if said medium is active or inactive;

establishing an active network server if said medium is inactive; and

using centralized token passing for access to a said medium when said medium is active, said centralized token passing controlled by said active network server, wherein said active network server grants access to said medium by sending a first token to a first network node, said first network node relinquishes access to said network medium by returning a second token to said active network server, said active network server grants access to said medium by sending a third token to a second network node, and said second network node relinquishes access to said network medium by returning fourth token to said active network server.

2. (Original) The method of Claim 1, wherein said active network server maintains a lineup card that lists one or more active client nodes.

3. (Currently Amended) The method of Claim 2, wherein said active network server passes a token to a selected client node, said selected client node being one of said one or more active client nodes listed on said lineup card, wherein said active node gets the token at least approximately once every  $N \cdot t$  milliseconds, where N is the number of slots in the lineup card and t is the maximum time in milliseconds a particular active node is allowed to keep the token.

4. (Original) The method of Claim 3, wherein said selected node is allowed to transmit data on said network medium only when said selected node has said token.

5. (Original) The method of Claim 3, wherein said selected node is removed from said lineup card when said node has been inactive for a period of time.

6. (Original) The method of Claim 3, wherein a new client node requests insertion on said lineup card by using spitting on the bus algorithm.

7. (Previously Presented) The method of Claim 1, wherein a presence of a datagram is detected by matching a specified preamble and length sequence.

8. (Original) The method of Claim 1, wherein access to said medium is provided by a media access control layer.

9. (Original) The method of Claim 8, wherein said media access control layer provides control structures to implement a spare receive buffer large enough to hold a Media Access Control Header.

10. (Original) The method of Claim 9, further comprising the step of sending a BUSY response from a receiving node to a transmitting node when said receiving node is swamped with previous packet requests.

11. (Original) The method of Claim 1, further comprising the step of issuing an auto-announce packet when a new node enters the network.

12. (Original) The method of Claim 1, wherein a preferred server node becomes said active server node in response to a wake-up algorithm.

13-27 (Canceled)

28. (New) A method for arbitrating use of a network medium to avoid collisions caused by multiple nodes attempting to transmit data on the network medium at the same time, said method comprising the steps of:

establishing an active network server

building a lineup card; and

using centralized token passing for access to a said medium when said medium is active, said centralized token passing controlled by said active network server, said active network server granting access to said medium by polling network nodes listed on said lineup card.

29. (New) The method of Claim 28, wherein said active network server sends a token to an active client node to grant access to said medium, and wherein said active client node returns a token to said active network server to relinquish control of said medium.

30. (New) The method of Claim 28, wherein said active network server passes a token to a selected client node, said selected client node being one of said one or more active client nodes listed on said lineup card.

31. (New) The method of Claim 30, wherein said selected node is allowed to transmit data on said network medium only when said selected node has said token.

32. (New) The method of Claim 30, wherein said selected node is removed from said lineup card when said node has been inactive for a period of time.

C 33. (New) The method of Claim 30, wherein a new client node requests insertion on said lineup card by using spitting on the bus algorithm.

34. (New) The method of Claim 28, wherein a presence of a datagram is detected by matching a specified preamble and length sequence.

35. (New) The method of Claim 28, wherein access to said medium is provided by a media access control layer.

36. (New) The method of Claim 35, wherein said media access control layer provides control structures to implement a spare receive buffer large enough to hold a Media Access Control Header.

37. (New) The method of Claim 36, further comprising the step of sending a BUSY response from a receiving node to a transmitting node when said receiving node is swamped with previous packet requests.

38. (New) The method of Claim 28, further comprising the step of issuing an auto-announce packet when a new node enters the network.

39. (New) The method of Claim 28, wherein a preferred server node becomes said active server node in response to a wake-up algorithm.

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